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Erratum: Improved measurements of the neutrino mixing angle θ_{13} with the Double Chooz detector

The Double Chooz collaboration

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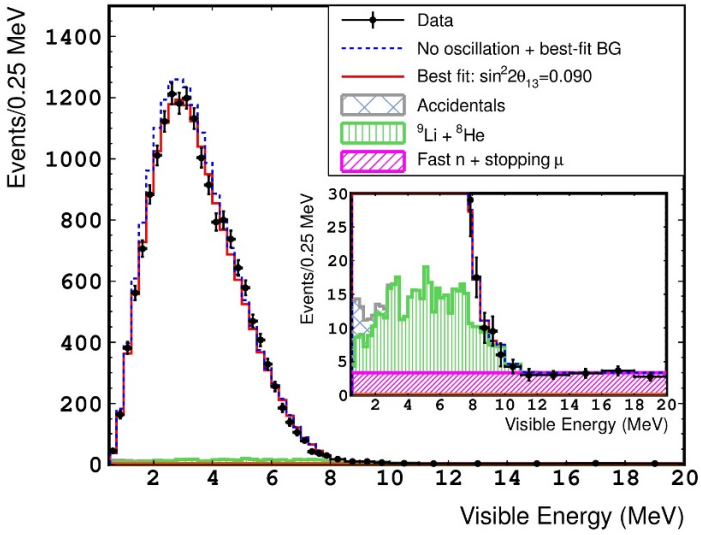

Figure 21. The measured energy spectrum of the prompt signal (black points) superimposed on the prediction without neutrino oscillation (blue dashed line) and the best-fit with $\sin^2 2\theta_{13} = 0.090$ (red line). Background components after the fit are also shown with different colors: accidental (grey, cross-hatched); ^{9}Li+^{8}He (green, vertical-hatched); and fast neutron + stopping muons (magenta, slant-hatched).

A mistake has been found in the calculation of statistical error bars of figures 21 and 22 for bins above 8 MeV. It affects only the graphical presentation and does not change the fitted θ_{13} value and other results of the paper. As a result of the correction, the error bars have become smaller. The figures have been replaced.

JHEP02(2015)074

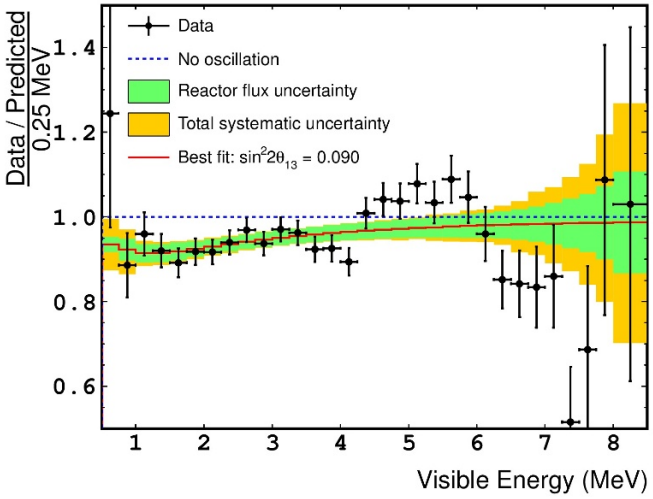

Figure 22. Black points show the ratio of the data, after subtraction of the background, to the non-oscillation prediction as a function of the visible energy of the prompt signal. Overlaid red line is the rate of the best-fit to the non-oscillation prediction with the reactor flux uncertainty (green) and total systematic uncertainty (orange).

JHEP02(2015)074